

A Study of Scientific Temper of Prospective Teachers In Relation To Their subject Stream

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Abstract

The near study was undertaken to evaluate and measure of Scientific Temper of prospective teacher. sample of 145 B.Ed. student- teachers was taken from one college of Dehradun. Scientific Temper was assessed by Scientific Temper Scale developed by Dr. Leela Pardhan . Arts Stream Prospective Teachers and Science Stream Prospective do not differ in their Scientific Temper.

KEYWORDS : Scientific Temper, Prospective Teachers.

Article 51 (A) says that “it shall be the duty of every citizen of India to develop the scientific temper, humanism and the spirit of inquiry and reform”.

The development of scientific temper often remains confined to the cultivation of a mere attitude of questioning. But there are four important ingredients of scientific temper and all of them need to be developed as adequately as possible. These are: impartial observation, untiring experimentation, unprejudiced consideration of every point of view relevant to the enquiry; and courage to go to the end of the enquiry until the ascertainable truth emerges through a process of verification and utmost possible synthesis of arguments and counter-argument.

Scientific temper describes an attitude which involves the application of logic and the avoidance of bias and preconceived notions. Discussion, argument and analysis are vital parts of scientific temper. **Scientific temper** is a way of life - an individual and social process of thinking and acting - which uses a scientific method which may include questioning, observing physical reality, testing, hypothesizing, analyzing, and communicating (not necessarily in that order).

. Any citizen, whether a scientist or not, or whether a student of science or not, can and should possess a scientific temper. But in order that the pace of progress is enhanced, there must be a positive encouragement to the development of scientific temper and to the right use of scientific and technological knowledge in solving both our economic and cultural problems. This encouragement can best be expected from the teacher, and this is what is rightly expected from the Prospective teachers.

A true teacher needs to exercise creative faculties and display scientific temper in behaviour using both hemispheres of the brain efficiently. The creative faculties help the teacher come up with fluent, flexible and original ideas.

OBJECTIVES:

To study the various Dimensions of Scientific Temper of the prospective teachers.

Hypothesis

There is no significant difference of Scientific Temper between arts Stream Prospective Teachers and Science Stream Prospective Teachers.

Sampling

The presented study consisted on the sample of 145prospective Teachers of Dehradun .

Method of the Study

To study the scientific temper of prospective teachers, a group of Prospective Teachers will be selected from the teacher education institutions for the study. The present study is in survey study in nature. Random Sampling technique is employed for study. 145 prospective teachers of a B.Ed College were selected .College was selected through lottery method.

Tool

Scientific Temper Scale developed by Leela pradhan (Kanaskar) was used to measure scientific temper which has four dimensions:

- Value perspectives
- Aversion of Superstitions
- A Set of Attitudes
- A World View Perspective

Data Analysis

Science Stream Prospective Teachers

| s.no. | Dimensions | N | M |
|-------|---------------------------|----|----------------|
| 1 | Value perspectives | 58 | 38.14 38.14 |
| 2 | Aversion of Superstitions | 58 | 14.29 |
| 3 | A Set of Attitudes | 58 | 9.05 |
| 4 | A World View Perspective | 58 | 9.88 |

Arts Stream Prospective Teachers

| S.no. | Dimensions | N | Mean |
|-------|---------------------------|----|-------|
| 1 | Value perspectives | 87 | 37.40 |
| 2 | Aversion of Superstitions | 87 | 13.97 |
| 3 | A Set of Attitudes | 87 | 8.55 |

| | | | |
|---|------------------------|----|------|
| 4 | World View Perspective | 87 | 9.70 |
|---|------------------------|----|------|

Comparison of Scientific Temper Scores of the Science and Arts Prospective

Table 3

| Groups | N | mean | SD | T |
|---------|----|-------|------|------|
| Science | 58 | 71.4 | 6.89 | 1.92 |
| Arts | 87 | 68.87 | 7.21 | |

Entries in Table 3 Shows The Mean Scores of Scientific Temper of Arts Stream Prospective Teachers and Science Stream Prospective Teachers. Scores shows that there is significant difference between Scientific Temper of Arts Stream Prospective Teachers and Science Stream Prospective Teachers at 0.05 level of significance.

Findings of the study

On the basis of the findings derived from statistical analysis, the conclusion was drawn that Arts Stream Prospective Teachers and Science Stream Prospective do not differ in their Scientific Temper.

Beneficiary Implications

On the basis of findings the following suggestions would be recommends

- ❖ Finding of the study can be helpful in providing the various techniques for the Cultivating Scientific Temper.
- ❖ Findings of the present study will able to understand the importance of Scientific Temper.
- ❖ It can be helpful in selection and training of teaching professionals.
- ❖ Finding of the study can be helpful to explore the various factors in Teacher Effectiveness.

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